UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
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OFFICE OF ENVIRONMENTAL CLEANUP

MEMORANDUM

DATE: April 14, 2016

SUBJECT: Dust Monitoring Results: August 2015, September 2015, October 2015, and January 2016 Monitoring Events
Burgard Industrial Park – SSI Area
ECSI #2355
March 11, 2016

FROM: Eva DeMaria, Remedial Project Manager

TO: Jim Orr, Project Manager
Oregon Department of Environmental Quality

Following are the United States Envrionmental Protection Agency's (EPA) comments on the memorandum, Dust Monitoring Results, August 2015, September 2015, October 2015, and January 2016 Monitoring Events, Burgard Industrial Park - SSI Area Portland, Oregon, dated March 11, 2016. The Bridgewater Group prepared the memorandum on behalf of Schnitzer Steel Industries (SSI). The subject property is SSI property at Burgard Industrial Park GeoRegion T4 and ECSI # 2355. The dust monitoring was performed in accordance with the May 7, 2014 Dust Monitoring Plan (DMP) and as a Source Control Evaluation (SCE) effort pursuant to the terms of the June 13, 2000 Voluntary Agreement for Remedial Investigation and Cleanup Measures between Schnitzer and the Oregon Department of Environmental Quality (DEQ).

The memorandum states that the purpose of the dust monitoring is to support the evaluation of potential impacts to the river and other offsite areas from airborne particulates originating from Schnitzer's industrial activities at the property. The dust monitoring was performed in accordance with the DMP, modified per an October 6, 2014 email from DEQ to Schnitzer. EPA's review focused on whether the dust monitoring protocols are adequate to evaluate contaminant transport from Schnitzer's activities to the river and if the results support the conclusion presented in the memorandum. The conclusions of the memorandum are:

> "*Dust control best management practices (BMPs) being implemented by SSI are effective and activities at the SSI site are not materially contributing to the dust levels in the area beyond the SSI site boundaries, in the overall Burgard Industrial Park, nor to the Willamette River.*"

Primary Comments

1. The objectives of the dust monitoring program are not consistently presented between the March 11, 2016 memorandum of results and the DMP. In the results memorandum, the purpose is defined as: "*to support the evaluation of potential impacts to the river and other offsite areas from airborne particulates*." This is different from the DMP, which defines the objectives of the dust monitoring program as: "*to assess the effectiveness of the SSP Dust Control Plan in reducing the amount of dust generated by site activities and*

preventing unacceptable migration of dust across facility boundaries." The data presented in the memorandum are insufficient to determine if the DMP objectives have been met.

2. The DMP and the March 11, 2016 memorandum do not provide any method to correlate the Absolute Area Coverage (AAC%) or Effective Area Coverage (EAC%) to horizontal mass flux or mass deposition (*e.g.*, grams/square meter), nor any identification of the constituents in the dust or size distribution of the dust particles. Without this information, it is not possible to determine how much dust and potential contaminants are being transported from the SSI site to the Willamette River. No criteria are noted in the DMP and dust monitoring results memorandum that characterizes "*potential impacts to the river and other offsite areas from airborne particulates*" or "*unacceptable migration of dust across facility boundaries*." Lacking this criteria and contaminant mass flux information, impacts to the river due to dust migration from the SSI site cannot be determined.

3. The dust monitoring results at perimeter monitoring stations do no support the conclusion of the dust monitoring results memorandum that "*activities at the SSI site are not materially contributing to the dust levels in the area beyond the SSI site boundaries in the overall Burgard Industrial Park, nor the Willamette River*." The S-02 and P-05 monitors show measurable dust occurring near the dock area and moving north off the SSI site during the August 2015, September 2015, and January 2016 sampling periods. Because the P-05 monitor clearly indicates dust transport from a southerly source, and based on its location on the shoreline of the slip, dust from the SSI site migrating north across the slip to P-05 is indicated. The P-02 monitor also indicates transport of dust from the direction of the SSI site during the August 2015 and October 2015 sampling periods.

4. The memorandum does not provide enough information on the location and timing of site activities that generate dust and the location, type, and timing of dust control measures in relation to the sampling periods. Lacking the temporal information it is not possible to evaluate the effectiveness of the dust control BMPs and verify the memorandum conclusion that "the dust control BMPs being implemented by SSI are effective."

Comments to Be Considered

1. EPA agrees with the reduction in sampler deployment from 7 days to 4 days. Limiting the potential for 100 percent saturation of the dust samplers will improve the usability of the data to determine the direction of dust transport.